

Preparation of Manuscripts and Compuscripts for the Journal of Ship Research

Introduction

As is the case for most peer-reviewed journals, there are five stages to final publication in the JOURNAL OF SHIP RESEARCH (JSR).

1. Manuscript submission and peer review.
2. Technical revision by the author.
3. Editorial review and corrections.
4. Preparation of final revised manuscript, graphics and compuscript.
5. Typesetting (as much as possible from the author's compuscript) and final proofing.

To commence the first stage, the author is requested to submit four complete paper copies of the manuscript to: The Journal of Ship Research, The Society of Naval Architects and Marine Engineers, 601 Pavonia Avenue, Jersey City, NJ 07306.

In the event that the manuscript cannot be accepted without major technical revision, the author will be asked to produce an intermediate revised manuscript before the editorial review. However, as is the case with many JSR papers, if the requested technical revisions are minor, the editorial staff will attempt to combine technical and purely editorial comment and will request that the author integrate both sets of comments into a final manuscript, graphics and compuscript.

Once a manuscript has been accepted for publication, the author will be asked to submit two paper copies of the revised manuscript, a set of first quality graphic material, and a compuscript which exactly matches the final manuscript.

The typesetting of the paper will be done with the T_EX typesetting engine. Accordingly, T_EX or L^AT_EX manuscripts are preferred. However, files from most WYSIWYG word processing software can be processed (although less completely) from author source. If necessary, typed manuscripts can be processed in the old fashioned way, that is, rekeystroked by the compositor.

The objective of this document is to indicate the preferred manuscript format, the general JSR style, and instructions for the preparation of the compuscript.

Manuscripts for Review

A manuscript for initial submission must be complete in the sense that it should present the principal points as clearly and concisely as possible, should include an abstract of not more than 200 words, and must include all illustrations and tables which are necessary for an understanding of the material.

The manuscript should be typeset, word processed, or typed on single-column pages of uniform size. For editorial and review purposes, line spacing should be at least the equivalent of the "space-and-a-half" option which is available on modern word processors and typewriters. There is no advantage to interleaved illustrations within the text, or in elaborate special visual formatting.

At the submission stage the editorial staff has no use for compuscripts—they are *not* desired with initial submissions. Similarly, original artwork, graphics and photographs are best held by the

author until a later stage in the process. Manuscripts which are formatted in two-column form, or in a form which emulates the printed format of JSR, are *not* desired. At the discretion of the editors, such manuscripts may be rejected prior to the commencement of the peer review.

Final Manuscript Format

The preferred format of the final manuscript is the same as that for initial manuscripts; that is, it should be typeset, word processed, or typed on single-column pages of uniform size with line spacing at least the equivalent of the “space-and-a-half” option which is available on modern word processors and typewriters.

Text type sizes of 10, 11, or 12 point are acceptable. A roman (serif) typeface is preferable, along with its italic and bold versions. There is no need to emulate the printed version’s occasional use of sans serif fonts. The same mathematical symbol fonts must be used consistently throughout the manuscript.

Apart perhaps from modifications to the default page layout and line spacing, the L^AT_EX article style is suitable. Other than the line spacing, the default page layout of most word processors will also be suitable. In short, a simple pedestrian format is in the best interests of all concerned.

However, in order to aid in the final typesetting and reduce errors, the content of the final manuscript should conform in many respects to the style and organization of the printed journal. These matters are outlined in the following sections.

Organization

The preferred organization of the major elements of both the initial and final manuscripts is as follows:

- Front matter material:
 - Title
 - Author(s) name(s)
 - Author affiliation(s)
 - Corresponding author, with address, fax number, and e-mail address
 - Date
- Abstract
- Introduction or Background Section
- Sections as necessary to present the material
- Conclusions or Summary Section
- Acknowledgments Section
- References Section
- Appendices
- List of Nomenclature
- Tables (each on a separate page)
- List of Figure captions
- Figures (each on a separate page)

This organization is the simplest for both the author and the compositor. The material for the front matter will be completely reformatted by the compositor. The format used for the manuscript front matter is of concern only insofar as the material is presented in an unambiguous and consistent manner. The corresponding author, address, etc., and the date, are for the use of the editorial staff; they will not appear in the printed paper.

Acknowledgments and Appendices are included only if needed. The References section is required even if there is only one reference. It may be omitted only in the unlikely case that there are no references at all. The list of Nomenclature is also optional, although one should be prepared for papers with a great deal of notation.

The Nomenclature, Tables and Figures are grouped at the end of the text because each will ultimately be processed separately from the text. In the printed version, Nomenclature will appear in a special three column block near the front of the paper, and Tables and Figures will appear as near as possible to the place of first reference.

Style

Abstract

Abstracts are *single paragraphs* of between 100 and 200 words which capture the essence of the work and thereby contain the key words which would be useful to automated search engines. (JSR does not include a key word section.) In the printed version the abstract is set without a heading. For manuscript purposes the Abstract may be headed and set in the form of a normal text section, or may be set with the default L^AT_EX environment.

Sectioning

Most papers need just two levels of section headings: (1) “sections” which are set in bold and centered in the printed version and (2) “sub-sections” which are set bold and flush left in the printed version. A “sub-subsection” would be set in normal text (roman) and set flush left. All section headings are typed in upper and lower case, that is, initial capitals followed by lower case. If at all possible, the manuscript should follow this system.

Section numbering has been traditionally discouraged in JSR. However, section numbering is acceptable where its use contributes to clarity; for example, in cases where it is necessary to make numerous references to other parts of the paper.

If used, the section numbering should be arabic and should extend only to the depth required by the context. For example, for a depth of two, the first section would be numbered 1., the first subsection under section 1 would be numbered 1.1, and sub-subsections would have no numbering. Please note that the Abstract, Acknowledgment, References and Appendix sections and subsections should *not* be numbered.

Paragraphing

Paragraphs should be indented consistently throughout the manuscript.

Footnotes

The complete citation of the work of others is accomplished by means of the References section: accordingly, footnotes for this purpose are not acceptable. Although an occasional footnote can be accepted, footnotes are discouraged. Authors are requested to integrate the information content of any potential footnotes into the text.

Equations and Mathematical Symbols

All equations of sufficient importance to be numbered should be numbered consecutively from start to end of the paper (including any Appendices). Equation numbers should appear flush right in parentheses.

It is assumed that manuscript equations will be composed by means of the equation-setting facilities of word processor software, by one of the popular equation-setting utilities, or by the \TeX engine. Mathematical symbols appearing in the manuscript text must be set using the appropriate math italic symbol rather than the nominal equivalent of the text font.

In the final typesetting phase, every effort will be made to break long equations so that, at 9-point type size, they will fit, centered, into the 3.5-inch columns of the printed format. Authors are requested to review long equations for the existence of convenient break points, and to consider a reorganization of equations which will not break cleanly. As an aid in this matter, Table 1 indicates approximate equivalent column widths for various manuscript type sizes.

Table 1: Equivalent column widths

Type size	Equivalent width
9 pt	3.5 in (89 mm)
10 pt	3.78 in (96 mm)
11 pt	4.13 in (105 mm)
12 pt	4.45 in (113 mm)

Tables

All tables are numbered (arabic) consecutively throughout the paper, including appendix tables if any. All tables must be referred to in the text.

The JSR Table convention is that only the first word (and any proper names or acronyms) are capitalized in titles, column headings, and table body headings.

The contents of tables are likely to be reformatted by the compositor. Please format tables to facilitate understanding by the compositor. Word processor users are reminded to tab all columns.

Figures

All figures (graphs, line drawings, photographs) should be numbered (arabic) consecutively throughout the paper, including Appendices if any. All figures must be referred to in the text. No frontispieces, “Plates” or “Photos” are acceptable—any such material must be treated as a Figure.

The JSR Figure caption convention is that only the first word (and any proper names or acronyms) are capitalized, for example:

Figure 1: Only the first word and any proper names or acronyms are capitalized in JSR figure captions

Referencing Style

The required referencing style for JSR is the “author–date” style. In this style, references are cited in the text by author names and year of publication. The corresponding reference list is arranged alphabetically by the last name of the first author and (secondarily) by date of publication. Please ensure that authors and dates match between text citations and their respective references in the References section.

Citation Style

Within the text, give the last name of the author(s) and the year of publication of the reference. If multiple references by the same author(s) appear in the same year, add suffixes a, b, ... to the year of publication. The year should always be enclosed in parentheses. Whether the author name(s) should be enclosed within the same parentheses depends upon the context.

When the author name(s) appear naturally in the citing sentence, only the date appears within parentheses. For example, "...It was shown by Ochi (1973) that ...". Otherwise, the author name(s) appear within the parentheses. For example, "...in the evaluation of the formula for the extreme (Ochi 1973),..."

When two or more references are cited, all the citations appear within one set of parentheses, usually in chronological order; for example, (Faulkner & Sadden 1979, Lewis 1988a). When there are more than two authors of a reference, the first author and "et al" normally appear within the parentheses, for example, (Sclavounos et al 1993).

Note that the only punctuation within the citations is the comma which separates multiple references.

Reference List Style

The references in the appended list are included only to provide examples of the JSR reference formatting style.

The first thing of note for all the entries is that the author(s) names are given last name first, followed by initials, in a small capital font. The year of publication follows, with no punctuation and what amounts to an extra space before and after the year. The convention is to render the titles of articles or papers all in lowercase text type, except for the first letter of the first word, or any proper name or acronym which should appear capitalized. The expression "et al" used to indicate "and others" is not italicized in this style. Authors who cannot set author names in a small capital font should use upper and lower text roman instead.

The remaining conventions depend in part upon the type of reference. (Lamport 1986, Lamport 1994) and (Newman 1977) are commercially published books. (Lewis 1988a) and (Lewis 1988b) are the first two volumes of SNAME's "PNA." (Harrington 1992) is SNAME's *Marine Engineering* text. Book titles are italicized and formatted with the capitalization conventions of the actual title. Volume, publisher, publisher address and pages (if not given in the text) follow in normal text roman type.

(Ochi 1973) and (Hasselmann et al 1973) are journal papers. The names of journals are always italicized. If the paper has appeared in a previous issue of JSR, the journal name is highlighted by small caps; that is, JOURNAL OF SHIP RESEARCH. Volume number follows the journal name in bold, then number, month and pages. (Faulkner & Sadden 1979) and (St.Denis & Pierson 1953) are papers which have appeared in the transactions of SNAME and RINA. This case is handled in the same way as a journal paper, except that the acronym for the professional society is not italicized. Authors who cannot set "JOURNAL OF SHIP RESEARCH" in a small capital font should use upper and lower text roman instead.

(Brown et al 1968) is a reference to a part of a book which has its own title, that is, is part of a "collection". In this case the title is handled as for a journal and the book title is handled as a book. Note that if editors are present, their names are inverted relative to the authors; that is, initials then last name. The listing ends with chapter, page and publisher information.

(ITTC 1978) is an example of a proceedings, specifically a part of a proceedings. The title of the part is handled as the title of a journal article. The name of the organization, etc. are formatted in text type. Note that in this case there is no author, and a pseudo-author (ITTC) is used for the purposes of text citation.

(Sclavounos et al 1993) is an example of a paper which appears in the proceedings of a symposium. (Kaplan et al 1977) is an example of a public-domain technical report. (Jiang 1995) is an example of a dissertation.

(SUMAN 1991) is a manual which has no specified author, and, finally, (MIL-B-17901B 1983) is a Military Specification. In both these last two cases a pseudo-author is used for the purposes of

citation.

Appendices

Although they will be formatted differently from the text in the printed version, the manuscript Appendices should be marked with a first-level section heading and formatted exactly as text. Multiple appendices should be numbered; that is, “Appendix 1” would appear in the heading for the first appendix. A single appendix should not be numbered.

Nomenclature List

A miniature example of a nomenclature list is included at the end of this document. The JSR convention is that the definitions are all lowercase type. In the printed version each entry in the list will be connected to its definition by an equals sign.

Graphics and Photographs

All graphics and photographs will be reduced to fit into single-column width or to span two columns of the printed paper. No figures or photographs will be accepted which can not be photographically reduced to fit within the printed page (including the caption).

To reduce the chances of error, the set of graphics, artwork and/or photographs which the authors are requested to submit with the final manuscript should be fully identified. Please identify all illustrations with figure number and author name(s). Use light pencil and include the information either on the back of the illustration or in an area that will not interfere with the reproduced image.

Graphics

If possible, the final form of graphics and artwork should be planned to be reducible to column width (3.5 inches, 89 mm), or failing that, to page width (approximately 7.1 inches, 180 mm).

For the typical chart, a successful reduction to single column width requires an aspect ratio (overall height to overall width including labels) in the neighborhood of unity, and lettering size and line weight which will remain legible after reduction.

The most important requirement for charts, line drawings and diagrams is that the lettering be legible after reduction to final size. Five-point or 1/16 inch lettering *after reduction* is about the *smallest* reasonable size, and then only if the original lettering is uniformly dark and sharp. For the best results, most labeling should reduce to the equivalent of 8 point type. Nearly any common chart lettering font is acceptable.

Graphic material should be original or laser printed on smooth paper. Charts or line drawings which have colored components are not acceptable. Colored components of a chart reproduce as unpredictable shades of gray. Graphical material on tracing paper or commercial graph paper will not yield an acceptable result. If the original graphics are pasted up composites, they should be reproduced to produce a single clean copy.

Photographs

Only sharp, high-contrast, glossy black-and-white or color photographs are acceptable. Because some detail will inevitably be lost in the conversion of color photos, black-and-white photos are much preferred. The material supplied must be capable of being reproduced as first-generation halftones. Photocopies, color plates, screened photographs, and slides are unacceptable.

Preparation of T_EX-Based Compuscripts

The authors of T_EX-based manuscripts should submit a diskette containing the T_EX, or L^AT_EX source file which was used to prepare the final manuscript. The source should be a single file if possible.

It is necessary that it be possible to process the submitted manuscript source under the distributed versions of Plain \TeX , \LaTeX 2.09, or \LaTeX 2e. Accordingly, all locally produced macro definitions should be incorporated in the file or included in the diskette. The author's graphics will be processed from the set of paper graphics submitted. It is thus not necessary to submit any of the graphics files which may be referenced in the source. \BIBTeX users please note that the final "bbl" file should be included in the source to make it independent of \BIBTeX and of the data base files. The Appendix describes the preparation of references using \BIBTeX .

The author's cover letter must mention the hardware and operating system under which the source was prepared, the disk format, the names of the files, the \TeX variant used, and the date. The final mathematical typesetting will be done with the Computer Modern Family with the \LaTeX math extensions. If mathematical symbols from other families have been used, please indicate the source, and which symbols are crucial. A "readme" file in the diskette with much the same information would be appreciated.

Please label the diskette with the name of first author, paper title, date, disk format, and hardware used. The 3.5-inch diskette size is preferred, although 5.25-inch diskettes can be accommodated. Diskettes must not be write protected. The diskette format may be either DOS or Macintosh.

It is emphasized that, in order to prevent hopeless confusion, the contents of the diskette must exactly reflect the textual material of the submitted paper manuscript. In case of conflict between the paper manuscript and the contents of the diskette, the hard-copy will be considered as the definitive version.

Preparation of Word-processor Based Compuscripts

The authors of word processor-based manuscripts are asked to save the manuscript in ASCII form and to submit a diskette containing the resulting file. If used, automatic hyphenation should be turned off before saving the ASCII file. All sections of the manuscript should be saved in a single file if possible. It is expected that mathematical formatting will be lost in the ASCII save operation. The author's mathematical formatting will be re-keystroked by the compositor. The author's graphics will be processed from the set of paper graphics submitted. It is thus not necessary to include any graphics files in the diskette.

The author's cover letter must mention the hardware and operating system under which the file was prepared, the disk format, the names of the files, the word processor software used, and the date. The final mathematical typesetting will be done with the Computer Modern Family with the \LaTeX math extensions. If mathematical symbols from other families have been used, please indicate the source, and which symbols are crucial. A "readme" file in the diskette with much the same information would be appreciated.

Please label the diskette with the name of first author, paper title, date, disk format, and hardware used. The 3.5-inch diskette size is preferred, although 5.25-inch diskettes can be accommodated. Diskettes must not be write protected. The diskette format may be either DOS or Macintosh.

It is emphasized that, in order to prevent hopeless confusion, the contents of the diskette must exactly reflect what remains of the textual material of the submitted paper after the ASCII save operation. In case of conflict between the paper manuscript and the contents of the diskette, the hard-copy will be considered as the definitive version.

References

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Appendix 1

Preparation of References with BIB_TE_X

The JSR citation and referencing style is not compatible with the distributed BIB_TE_X styles. Accordingly, some aids to the BIB_TE_X user have been developed. Two style and three auxiliary files are supplied, with the following names.

```
jsrcite.sty
jsrpaper.bst
jsrinst1.tex
jsrinst2.tex
jsrinst.bib
```

The file `jsrcite.sty` is a L^AT_EX 2.09 style option which modifies the action of the `\cite` command. It is meant to be read in as a style option to the L^AT_EX `article` style.

The programming in the style option for the author–date style of reference citation and the corresponding BIB_TE_X style are modified versions of the `authordate1–4` styles developed and contributed to the Comprehensive T_EX Archive Network (CTAN) by David Rhead of Cripps Computing Centre, Nottingham University.

The file `jsrpaper.bst` is a BIB_TE_X 0.99 style file which produces reference entries in substantial conformance with the JSR style, and according to the requirements of the author–date citation system which is established by `jsrcite.sty`.

The file `jsrinst1.tex` is a L^AT_EX 2.09 source file for the present document which includes the reference list and is thus independent of BIB_TE_X.

The file `jsrinst2.tex` is a L^AT_EX 2.09 source file for the present document which requires a BIB_TE_X run to generate the reference list and thereby confirm the workability of `jsrpaper.bst`.

The file `jsrinst.bib` contains the references of this document in $\text{BIB}_{\text{T}}\text{E}_{\text{X}}$ database format for use with `jsrinst2.tex`.

Reference List Coding

The `jsrcite` style assumes that the reference list is written in the standard $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ way; that is, the list is entered as a series of `\bibitem`s in the `bibliography` environment as follows:

```
\begin{thebibliography}{}

\bibitem[<label>]{<cite_key>} <entries>

\bibitem[<label>]{<cite_key>} <entries>

\end{thebibliography}
```

Some unusual detail in the `\bibitem` label will be noted presently.

Citation Coding

The author–date referencing system which is incorporated in the style includes a nonstandard `\shortcite` command as well as the standard `\cite` command. It also requires that all `\bibitem` labels must be present.

The `\shortcite` command is used to format the year of publication after the author’s name appears naturally in the text. For the example given previously, that is, “...It was shown by Ochi (1973) that ...,” the source appears as:

It was shown by Ochi `\shortcite{ochi73}` that

where `ochi73` is the cite-key for the reference.

The author’s name appears within the parentheses when the standard `\cite` command is used. For example, (Ochi 1973) results from `\cite{ochi73}`. Similarly, (Lewis 1988a, Faulkner & Sadden 1979) results from `\cite{pnaI,faulkner78}`, where `pnaI` and `faulkner78` are the cite-keys for the two references.

In order to make the author–date citation style work, the label field in each `\bibitem` must be defined, and moreover, to make the `\shortcite` work there must be some special treatment of the author name. The following example is the first line of the `\bibitem` of (Ochi 1973).

```
\bibitem[\protect\citename{Ochi }1973]{ochi73}
. . .
```

Note that the special treatment involves entering the author(s) name(s) within the argument of a `\citename` command, while the year remains outside it. The remainder of the `\bibitem` is standard markup.

The $\text{BIB}_{\text{T}}\text{E}_{\text{X}}$ Style

The $\text{BIB}_{\text{T}}\text{E}_{\text{X}}$ style file `jsrpaper.bst` produces results which are coordinated with the author–date citation requirements just outlined. It is used in place of the distributed $\text{BIB}_{\text{T}}\text{E}_{\text{X}}$ styles, and results in a `.bbl` file in which the references are alphabetized and formatted in substantial compliance with the required style.

A formatting idiosyncrasy may be mentioned, an artifact of the behavior of the $\text{BIB}_{\text{T}}\text{E}_{\text{X}}$ case changing command. Because many, if not most, reference list styles involve the capitalization of the important words within titles, it is natural to enter titles in the $\text{BIB}_{\text{T}}\text{E}_{\text{X}}$ database this way. Accordingly, the style uses the $\text{BIB}_{\text{T}}\text{E}_{\text{X}}$ case changing command to format the title all in lower case (except for the first letter of the first word). If there is an upper case acronym or a proper name in

the title, it will thus be changed to lower case with everything else. There are two fixes. The first is to edit the final version of the `.bbl` file. The second possible fix is to enclose the acronym or proper name in braces in the database file. For example, the acronym “(JONSWAP)” in (Hasselmann et al 1973) is written `{(JONSWAP)}` in the database.

The customary computer science macros which appear in `.bst` files have been eliminated, and the following macros substituted.

`sname` *Trans.* SNAME
`jsr` JOURNAL OF SHIP RESEARCH
`mtech` *Marine Technology*
`jspd` *Journal of Ship Production*
`rina` *Trans.* RINA
`isp` *International Shipbuilding Progress*
`jfm` *Journal of Fluid Mechanics*
`jasne` *Naval Engineers Journal*
`asne` American Society of Naval Engineers
`snaj` *Journal of the Society of Naval Architects of Japan*
`aor` *Applied Ocean Research*
`oeng` *Journal of Ocean Engineering*

Nomenclature

t time
 F_X hydrodynamic force on the body in the positive X direction
 L length
 M mass